

I have discovered no parasites. Mould, however, more than makes up the deficiency of insect enemies, for it is very evident that it reduces the number of larvæ by one-half or more. The ♀ lays an immense number of eggs but the family Hepialidæ is apparently an unsuccessful one for the imagos are always comparatively scarce. In past years they were more plentiful, but now the progress of civilization has wiped out many of the favorite haunts of *Hepialus sequoiolus* so that at present it is a rather rare insect.

Descriptions of two new Hymenopterous Egg-parasites.

BY A. ARSENE GIRAULT, Washington, D. C.

Paracentrobia flavipes sp. nov.

Female.—Length 0.81 mm.—Body bright yellow, the head a shade deeper; legs, venation, cheeks below the eyes, portions of the face, pronotum, pleura and tegulæ, and caudal margins of the abdominal segments, dilute black, forming a beautiful contrast to the yellow of the body, the abdomen thus with five dusky rings. Articulations of the legs; the anterior tibiæ, and tarsi; the basal two-thirds of the tibiæ and the tarsi of the intermediate legs; the basal tibiæ and the tarsi of the posterior legs; and the knees, pale yellow. Tips of the tarsi dark. Eyes and ocelli deep red, the latter three in number, in a triangle on the vertex. Submarginal vein paler.

Head rounded slightly; deeper in color than the body; the vertex much swollen, transversely striate, eyes ovate, coarse; mandibles falcate, tridentate at tips, the outer tooth slightly the largest; in color, apical half reddish brown, basal half pale. Thorax subconvex, shorter than abdomen; faintly longitudinally striate, the metanotum acute. Abdomen cylindrical oval, longer than thorax, the ovipositor visible, acute, pale yellowish; caudal segment of abdomen obliquely truncate. Wings short and broad, marginal fringes short. The whole body with scattered stiff hairs, arranged more regularly on the abdomen and antennæ.

Antennæ sub-concolorous with thorax, a little dusky because hispid; 7-jointed, scape, pedicel, ring-joint, 1-jointed funicle, 3-jointed club. Scape nearly as long as pedicel and funicle combined; pedicel oval, much shorter than the funicle joint; the latter and basal joint of club subequal, the funicle joint longer and cylindrical oval; club inversely club-shaped, its basal joint subhemispherical, the second much smaller, obtusely conical, its apical joint still much smaller, narrower, acutely conical. Basal joint of the club the broadest, the apical joint the narrowest of all the antennal joints. Ring-joint very flat, as broad as the base of the funicle joint; inconspicuous.

From two specimens.

Male.—Length, 0.78 mm.—The same. Caudal segment of abdomen obtusely rounded, the abdomen itself less stout.

Antennæ 7-jointed, short, with a scape, pedicel, a ring-joint, 1-jointed funicle, and a 3-jointed club. Scape long, cylindrical, tinged above with dusky, nearly twice the length of the pedicel; the latter obovate, smaller than the funicle joint, but about equal to it in length. Ring-joint nearly as broad as the funicle joint at base, difficult to distinguish. Funicle joint nearly globular, slightly longer than broad, subequal in length to the pedicel. Club ovate, or subconical, its base somewhat rounded, the longest joint of the flagellum, but not as long as the scape; hispid, indistinctly 3-jointed, apparently solid, the middle joint the largest.

From three specimens.

Supposedly bred from the eggs of *Anthonomus quadrigibbus* Say, in the fruit of *Cratægus*, sent in by Mr. J. H. Beattie from Fort Valley, Georgia, in connection with the Deciduous Fruit-insect Investigations, Bureau of Entomology, United States Department of Agriculture, June 12, 1905. Probably, however, from some Lepidopterous egg found concealed under the calyx end of the fruit. Occasional.

Type.—No. 8942, U. S. N. M.

There is some uncertainty in regard to the generic position of this species, and finally it may prove to be the type of a new genus.

In structure, the antennæ apparently disagree with any of the known genera.

Gonatocerus anthonomi sp. nov

Female.—Length, 0.83–0.87 mm., 0.85 mm., avg.—Head and thorax piceous black, shining, the abdomen suffused with brown. piceous along the sides and towards apex, its basal segment lighter in color. The front of the head with a distinct inverted V-shaped marking of pale, reaching from a point on the vertex to the lower inner margin of eye. The margins of the eyes pale. On the thorax, there is an oblique longitudinal pale streak, distinct or indistinct. Legs honey yellow, excepting the whole of the middle of the femora, the posterior femora, the coxæ, portions of basal joint of trochanters, and most, if not quite the whole, of the tibiæ, excepting the anterior tibiæ, all of which are blackish. Tips of the tarsi darker. Antennæ dull reddish brown with some black, excepting the scape and pedicel, which are yellowish, tinged with blackish along the upper edges.

Head deeply concave along the face; eyes and ocelli dark. Thorax impunctate, faintly shagreened, about as broad and stout as the abdomen. Abdomen pointed, subsagittate; the first segment faintly striate, with a round fovea at base; the middle segments about equal. Wings

normal, iridescent, with a purplish hue to naked eye; marginal fringe rather long; venation dusky yellowish. Body bearing sparse short whitish hairs.

Antennæ 11-jointed, elbowed. Scape long, its base slender, slightly curved, as long as the next four joints combined; pedicel short, oval, much longer than the following joint; 3, 4, and 5, shortest, subequal, 5 slightly longer, each about half the length of the pedicel, globular; 6 longer and wider, next the smallest joint after 3, 4, and 5; 7 the longest funicle joint, cylindrical, much thicker than 6, and slightly more so than 8, equal in width to 9 and 10; 8 smaller than 9 and 10, larger than 4; 9 next the longest funicle joint, equal in width to 7 and 10, the latter short but longer than 4; 11 or the club, about as long as 8, 9, and 10 combined, the thickest joint cylindrical. Antennæ pubescent, shorter than body.

From three specimens.

Male.—Length, 0.81 mm.—The same. More slender. Antennæ 13-jointed, filiform. Scape short, longer than the following joint, the latter, the pedicel, rounded, not half as long as the first funicle joint. The following joints cylindrical, about equal, or slightly longer cephalad. Apical joint, or the club, subconical.

From a single specimen.

Bred supposedly from the eggs of *Anthonomus quadrigibbus* Say, in the fruit of *Cratægus*, June 18, 1905, sent in by Mr. J. H. Beattie from Fort Valley, Georgia, in connection with the Deciduous Fruit Insect Investigations, Bureau of Entomology, United States Department of Agriculture.

Type.—No. 8435, U. S. N. M. 1 ♂, 1 ♀.

Descriptions of New Coleoptera from Arizona with Notes on Some other Species.

BY HENRY SKINNER.

Plisiotis beyeri n. sp.

Form oval, somewhat elongate; surface bright apple green. Head sparsely punctate, clypeal margin narrowly reflexed. Antennæ piceous, basal joints rose pink. Thorax not twice as wide as long, a little narrower at apex, broadest at middle, hind angles nearly rectangular, surface finely punctate with no admixture of coarser punctures. Elytra very little wider at base than the thorax, broadest at the middle, surface very obsoletely striate, the striations under a lens appearing confused. Body beneath lighter and of a more golden tint; metasternum coarsely punctate. Legs entirely rose pink with a pearly opalescence, except the femora of the first pair which are golden apple green. Length 31 mm.